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Collaborative Learning 2.0: Open Educational Resources

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Chapter 19

Collaborating over Rich Media: The Open University and BBC Partnership

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ABSTRACT

Open Educational Resources comprise many types of assets, including rich media. However, dynamic rich media offer different opportunities and challenges for learners, teachers, and higher education institutions alike than do more static items such as text. The Open University in the UK (OUUK) has been extensively developing and using rich media in collaboration with the British Broadcasting Corporation (BBC) for its distance teaching and outreach programmes since it was established in 1969. As new media technologies have arrived, so have the capabilities of the OUUK and the BBC to create rich media in partnership and make them openly accessible. This chapter describes these developments and then discusses the approaches and evidence required to guide them in a way that both serves the BBC, the OUUK, the higher education sector, and the wider community. It concludes that rich media are an essential part of the developing OER landscape and that openly sharing them brings defined benefits to an HEI beyond their traditional student body.

INTRODUCTION

Open educational resources (OER) comprise many types of assets including dynamic rich media (audio or video tracks, animations, and podcasts) with channels such as iTunesU and

YouTube EDU partly dedicated to such media. However dynamic rich media offer different opportunities and challenges for learners, teachers and higher education institutions alike than do more static items such as text, slides and graphics. They offer technical and pedagogical challenges to teachers and learning challenges to students. They are relatively easy to use ‘as-is’ but more

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difficult to re-purpose. They can be more costly in money and effort to produce than more static media and in principle would benefit from being shared with others or collaboratively developed to save on such costs. So what value do rich media provide to higher education institutions and how should they use them as OER?

The Open University in the UK (OUUK) has been extensively developing and using rich media in its distance teaching programmes since it was established in 1969. It has particularly benefitted from a longstanding partnership with the public service British Broadcasting Corporation (BBC) who have helped both in the development of certain rich media but also provided free to air broadcasting slots for radio and television programmes, originally aimed only at students (but with a wider drop-in viewing audience) and latterly with a more explicit public engagement remit. As new media technologies have arrived so that relationship has developed, as has the capabilities of the OUUK itself to create rich media in other ways and with other partners. In 1999 the OUUK and the BBC collaborated on a UK focussed website (Open2.net) that supported the broadcast programmes. In 2006 the university entered the formal OER world with the launch of OpenLearn. In 2008 it began its iTunesU and YouTube channels. In 2010 it has brought all this activity under the OpenLearn brand and continues to develop its ‘broadcast strategy’ in a multiplatform world, where interaction with ‘viewers’ is more two-way than ever before.

While the initial start up costs for OpenLearn were mostly covered by an external grant from the William and Flora Hewlett Foundation most of this 40 or so years of activity has been funded through the University’s internal resources gained from teaching grant and student fee income. The OUUK has therefore always looked strategically at what this involvement with public facing rich media does to further the mission of the University. This chapter first outlines the major characteristics of the University and the BBC, gives a brief history of their joint work on public broadcasting

and use of new technologies, particularly ICTs, then describes these strategic considerations and finally discusses the approaches and evidence required to guide and shape strategy in a way that both serves the University, the BBC and the wider higher education community. It concludes that rich media are an essential part of the developing OER landscape and that openly sharing them brings defined benefits to an HEI beyond their traditional student body, but that media organisations, whether public or private have yet to face up to the challenges of an OER world.

THE OPEN UNIVERSITY’S EDUCATIONAL COMPETENCIES

The Open University in the UK is open to people, places, methods and ideas. It promotes educational opportunity and social justice by providing high quality education to all those who wish to realize their ambitions and fulfil their potential. Through academic research, pedagogic innovation and collaborative partnership it seeks to be a world leader in the design, content and delivery of supported open and distance learning (see <http://www.open.ac.uk/about/ou/p2.shtml> for more details about the OUUK).

As the UK’s only university dedicated to using open and distance learning for its taught programmes, and the first ‘open university’ to be created in the world, the OUUK has pioneered methods for large-scale delivery of educational opportunities through what it calls ‘supported open learning’, whereby it adds a wide range of support services (for example information, advice and guidance, tuition, assessment, credit rating, credit transfer, specialized hardware and software for disabled students) around the specially developed educational materials that students need to study:

- It services more than a quarter of a million students each year;

- It has taught two million people and awarded more than 350,000 degrees since 1971;
- It has students and partners in over 100 countries;
- It has several million people from over 220 countries and territories accessing some of its educational material each year.

The OUUK curriculum is rich in the range and types of academic content which can be harvested for open educational resource delivery. Its modules and programmes range from the access to higher education level to taught doctorates, including research-based doctoral degrees. They have been developed across a wide spectrum of academic areas from the arts and humanities to mathematics, science and technology, including major interdisciplinary, professional or vocational programmes.

Through its team processes, the University has a long history of bringing together subject specialists with experts in learning technologies and media production. This enables matters of subject content to be considered alongside learning technology issues and creative critical interaction across different skills sets.

The University has a wide range of curriculum products available in a variety of media from which to select for open publishing:

- Standard printed texts in PDF, Word and/or XML formats;
- CD-ROM and DVD based audio-visual materials and educational software, along with materials which have been developed specifically for on-line usage;
- Television archive footage, photographs and images (although some is not currently in a digital format); and
- Standard materials comprising a mix of text, audiovisual and software elements that have already been developed or 'versioned' for web delivery.

The University employs tutors for set groups or batches of students working on an individual module. Recognizing that different students have different learning styles and approaches, the tutors help the students in their groups to navigate and approach the materials in ways that suit each student's individual needs. The tutor therefore facilitates the learning process as much as directly re-interpreting parts of the teaching embodied in the educational materials.

Through the judicious mix of educational content and teams of people the OUUK has experience of developing and supporting formal and non-formal learning opportunities designed to:

- Replicate or transform the face-to-face teaching process at a distance through the use of technologies, including the use of home experiment kits, interactive online experiments or virtual field trips;
- Facilitate support processes which encourage the creation of learning communities and stimulate an appetite for further study such as extensive use of electronic conferencing;
- Encourage access to formal higher education; and
- Work with partner organizations to reach target groups which do not traditionally have access to university study or lack confidence to begin study.

We have provided this brief overview of the OUUK's educational competencies so that our discussion of its use of rich media for over 40 years can be seen in the context of how it organises its teaching.

THE BBC'S CONTRIBUTIONS TO EDUCATIONAL PROGRAMMING

The BBC is the major public broadcaster in the UK funded primarily through a licence fee from every

household owning a television in the UK. It runs a number of free-to-air TV and radio channels providing the full spectrum of programme types and genres (see <http://www.bbc.co.uk/aboutthebbc/purpose/what.shtml> for more details). It does so within its founding values ‘to educate, inform and entertain’ (which matches well with the OUUK’s Charter requirement to ‘promote the educational well-being of the community generally’). The focus in this chapter is on its specific factual and educational programming (of which the OUUK partnership forms a part). The programmes in the factual genre are entertaining while educational. The programmes in the educational genre are primarily educational and generally of a less populist nature but may also be entertaining and attractive to larger audiences. This enables the BBC to serve a wide range of educational needs and commission programmes that other broadcasters might not.

The BBC has the ability to work across a wide ‘learning spectrum’ at all educational levels and linking to many different educational institutions, from schools to universities, libraries, museums and learned societies, mostly within the UK but increasingly more widely. The range of national TV and radio channels and regional programming within the UK means that the BBC is in an ideal position to address matters of public and social interest and national priority, such as to increase participation in educational activity or cover basic skills such as digital literacy (for more details see http://www.bbc.co.uk/aboutthebbc/purpose/public_purposes/education.shtml).

While starting out as a free-to-air broadcaster, the BBC, like many media organisations is now able to use free-to-internet channels for broadcasting, narrowcasting and multicasting and at the same time increase the two-way communications with its users as well as educational organisations. Through its many web services and particularly the main BBC website (www.bbc.co.uk), the BBC has been able to extend the range of media content that it develops to support and supplement the main programming outputs. More recently the

development of the iPlayer (<http://www.bbc.co.uk/iplayer>) has meant that the way that this programming output is consumed, when it is consumed and where it is consumed is changing. So, while much of the programming output has generally only been available in the UK (including through YouTube), and except where it is re-broadcast to other territories under licence, the web-based content is often available around the world from their website and sometimes via other channels whether legally or not (at the time of writing all this rich media content is always available under full copyright and not an open licence, although the BBC did experiment with an open licence as part of the creative archive pilot project between 2006 and 2006 – see <http://www.bbc.co.uk/creativearchive/>).

A HISTORY OF BROADCASTING AT THE OPEN UNIVERSITY

This account and that in the next section are heavily based upon a number of internal OUUK documents. In 1969, the year the OUUK received its Royal Charter; it was formally established as an accredited and independent University. It was initially named in the early planning stages as a ‘University of the Air’ by the UK Government (Weinbrein, 2011a) and so a feature of its implementation was a relationship from the outset with the BBC through which both have benefitted and both been able to experiment with new technologies. Indeed, a BBC production department for OUUK programmes was set up at Alexandra Palace, London, in premises vacated by TV news. The first OUUK broadcasts of programmes that supported the other specially prepared educational materials devised for the courses and mailed out to students, went out on the BBC TWO channel – itself a recent innovation – and on Radios 3 and 4, in the first week of January 1971 (Seatter, 2011). They actually preceded the signing of the first of a series of formal agreements which has

governed the relationship between the University and the BBC ever since. This took place in December 1971. Since that first broadcast over 7,000 television and 4,000 radio programmes have been produced as part of the OUUK/BBC partnership, with over 300 million viewers in 2009/10 alone.

For many in the UK these early black-and-white late night TV programmes still conjures up images of earnest, bearded professors with flipcharts as many were devised as ‘studio lectures’. But they made the OUUK a household name, and at the time, they were breaking new ground in educational programming. Social scientist Professor Michael Drake, one of the academics who took part in those pioneering recordings, recalled the challenges in a later interview: *“Each programme took one day. We rehearsed once, then recorded it, with no stopping because of errors. I’m surprised I don’t have nightmares still.”* And there was innovation. OUUK lecturer Robert Bell recalled many maths programmes which *‘involved ingenious working models that would have been unavailable then in a conventional university’*.

A number of technological developments were used or trialled at the OUUK Production Centre; the BBC’s first video rostrum camera, for example, was installed at Alexandra Palace, London in the 1970s. People think of OUUK TV programmes being broadcast to an audience of bleary-eyed students and insomniacs late at night, because in the days before video recorders, they had to be shown in slots outside the main programming schedules of the BBC channels and when students were available to view the transmission itself – before BBC2 started up on weekday evenings, and on Saturday and Sunday mornings.

The OUUK Production Centre was moved to the Walton Hall campus in Milton Keynes in July 1980, where technological innovation in production continued. In 1983, the Production Centre’s outside broadcast truck was replaced with two portable single camera units, pioneering lightweight VT (videotape) recording for non-news programmes. The 1980s also saw the

development within the Production Centre of one of the first offline VT editing systems creating electronic edit decision lists. In 1986, the OUUK Production Centre provided video facilities to the national Domesday Project, which encouraged schoolchildren across the UK to send in text and images for central storage and which incidentally later raised the issue of the permanence of digital materials (Darlington et al, 2003).

Meanwhile viewing habits were changing significantly. No longer did students have to watch material only at the time it was broadcast, thanks to the widespread take-up of video recorders during the 1980s and into the 1990s. This allowed for OUUK programmes to be broadcast during the then overnight BBC TWO Learning Zone and recorded by students for watching later. Since the signing of the first agreement between the OUUK and the BBC, the agreement has been subject to regular review. The Fourth Agreement, for example, saw the creation in December 1998 of a Joint Commissioning Unit, made up of BBC and OUUK staff working alongside on another to manage the commissioning and delivery of OUUK programmes. And also in the 1990s the University’s work also expanded beyond course related programmes. It began to commission peak-time series for BBC channels while continuing to deliver material specifically related to individual courses in the late-night Learning Zone. On top of this the OUUK also commissioned the open2.net website, which was produced by BBC Worldwide Interactive Learning. Since 1997 this has provided access ‘through the campus walls’ as this URL was provided as the next step for viewers wanting to take their interests further after watching a jointly commissioned OU/BBC programme (in fact this has been part of learner journey model whereby people might migrate from passive informal viewing to active informal learning on that website to consideration of signing up for formal courses with the University).

By 2002, technological advances had again changed the nature of the University’s broad-

cast activity. Audio-visual material for courses was made directly by the University and sent to students in the form of CDs and DVDs. The Production Centre at Milton Keynes closed in September 2003. December 2006 saw the last of the course-related programmes to be shown on the Learning Zone. But OUUK broadcasting on mainstream TV and radio continues – the following year, 2007, saw more than 20 TV series go out bearing The Open University logo. Since then the OUUK’s mainstream broadcasting has gone from strength to strength. *Coast*, *Child of our Time*, *Chinese School*, *Fossil Detectives*, *James May’s Big Ideas*, *History of Scotland*, *Olympic Dreams...* are all OUUK programmes and ones which have often been taken up by other broadcasters around the world. They attract larger and more diverse audiences than the old course related programmes could hope to, with viewer numbers for the most popular into the millions, as well as over 2 million visitors overall to the accompanying open2.net site. Production qualities are high, with a number of series, such as *Coast*, winning awards. And the programmes still retain solid academic content. No less than three OUUK programmes: *Tree of Life*, *Darwin’s Dangerous Idea* and *Jimmy Doherty in Darwin’s Garden* – were shown to mark the 200th Darwin Anniversary.

OUUK academics still have a significant input to the content of the broadcasts, although TV professionals and personalities are more likely to be the presenters nowadays. The OUUK also makes an input into existing flagship BBC programmes such as *Timewatch*, *The Money Programme* and a number of David Attenborough’s natural history epics. And on radio, OUUK programming has also gone increasingly broader with series such as Radio 4’s statistics detective show *More or Less*, new technology BBC World Service series *Digital Planet* and Radio 5’s *Breaking Science*, while the web presence has moved from the open2.net site run by the BBC for the OUUK to the newly fashioned OpenLearn site run by the OUUK.

A HISTORY OF INFORMATION AND COMMUNICATION TECHNOLOGIES USE AT THE OPEN UNIVERSITY

The OUUK has used much more than just broadcasting technology. It was founded on what Harold Wilson, the Labour Prime Minister credited with proposing and then establishing the University (Weinbrein, 2011b), called “*the white heat of technology*” - and it has played a vital role in the University’s development ever since. In the beginning there was the belief that technology could bring high quality degree-level learning to people who had not had the opportunity to attend campus universities. And when students did not have access to technology – it would be sent to them. Among these were Home Experiment Kits which were sent out to thousands of students studying the Science Foundation course in the early 1970s. These included the McArthur microscope which was adapted from an original metal design, to make a cheaper, lighter moulded plastic model. Students studying biology as part of their second level studies in science were lucky enough to receive pickled sheep brains, weighing about 4oz, which would be dissected with instruments supplied in the kit. Replica fossils were also sent to geology students, which meant realistic casts were made in a garage which got over the obstacle of students not being able to get hold of real fossils, so they could examine the next best thing. Computers were even sent out to students. These included the 64KB HEKTOR III, a single board computer built by the OUUK for *The digital computer* course, which came with a 104-page manual.

In the early 1980s computer courses used mainframe systems and students had to go to regional centres to type in their answers and get print-outs. In the 1990s, more and more courses, mainly maths, computing, technology and science started to use the power of the Personal Computer and multi-media formats. For example the *Discov-*

ering science course in 1998, used video footage of flora and fauna on the Galapagos Islands. This footage was re-worked in 2009 for iTunesU and after promotion from Apple, it quickly became one of the most popular downloads on the site. Another course, *Environmental Science* delivered a virtual field trip in its first two or three weeks which meant students could carry out measurements, observations and analysis of the growth of heather in the Teign Valley in the county of Devon without having to leave their homes – or get wet. This was particularly useful for disabled students, or other students who would be unable to go on an actual field trip.

Of course the emergence of the Internet, modems and web browsers enabled the University to provide much more of the educational materials online rather than having to send them through the post and enable much more two way communication between OUUK staff and students than was possible through post and telephone. The first major course where the content and communication was delivered mainly online was *You, Your Computer and the Net* in 2000, when nearly 12,000 students signed up for it in this first year! Since 2006 all OUUK courses utilise ICTs to some degree such that some of the educational content is available from a course website (although also available in physical form) but most communication is now done through the internet.

Equally, since 2006, the OpenLearn website (www.open.ac.uk/openlearn) makes OUUK materials freely available on the internet with state-of-the-art learning support and communications tools to connect learners and educators around the world. However, as noted earlier, the University had previously taken advantage of the new opportunities offered by the advent of the Internet and new media, developing an online learning portal, open2.net, with the BBC in 1998 that supported and supplemented the broadcast programmes. Broadcasting has changed out of all recognition over the last 40 years, and TV and radio have been joined by other new media. Open University mate-

rial is now available through a variety of channels, not only OpenLearn but also through YouTube (<http://www.youtube.com/theopenuniversity>) and on Apple's iTunesU service (<http://open.edu/itunes/>). But broadcasting and its partnership with the BBC remains a central part of what the OUUK does – making learning accessible. Part of the OUUK's mission is to reach out beyond its students, stimulating people to learn, and opening up access to new learning opportunities across a range of areas of interest and concern.

SHARING AND USING RICH MEDIA EDUCATIONAL CONTENT FROM THE OPEN UNIVERSITY

Ever since it started teaching students in 1971 some of the educational content produced by the OUUK has been openly available and accessible to people within the UK (less so outside the UK). Many of its teaching texts are co-published with educational publishers and so available (at cost) in bookshops or (at less cost or for free) from students who have completed the course and no longer want them or (for free) in public Libraries. More importantly, all the television and radio broadcasts, whether course related or of a wider nature, have been done through free-to-air public channels run by the BBC so that the UK public could both watch them for free and (later on) freely record them off-air for personal viewing at a more convenient time. BBC surveys consistently showed there was a substantial drop-in viewing audience for even course related programmes broadcast early in the morning, many of whom had no intention of studying the related courses but liked the programmes because they were educationally focussed. The more recent non-course related programming has gained even more substantial viewing audiences and because of the relationship with the BBC has been available for time limited viewing outside the broadcast slot (usually only in the UK) via its iPlayer software platform.

While individuals could record these programmes for their personal use it was illegal to show them to a 'public audience'. This could even be the case where it was done for students at another University (it is the scale of such use that made it possible or not through the educational exceptions elements of the relevant copyright legislation) but all UK Universities were able to sign up for a general licence that enabled them to record and use as many OUUK/BBC programmes as they wished (no such licence was ever devised for the physical educational content but they were available (at cost) to be recommended texts in other Universities courses while many of the tutors were teachers at other Universities and were very creative in re-using the course materials provided with the course they were supporting in their own courses that they were teaching in the 'home' university). This open availability and accessibility of rich media (in this case radio and TV programmes) meant that use 'as-is' has been happening quite a lot in the UK, which has been a good thing for all concerned, particularly as these resources have been produced to high academic quality (often involving top academics from other universities as consultants) and high technical standards (drawing on BBC experience) both of which can make it a costly exercise. However all this content was still only available under a full rights reserved license so any user could not make alterations or repurpose these educational resources without first seeking permission (indeed internationally our OU Worldwide division has made revenue from the selling and licensing of some of this content).

Since joining the OER movement in 2006 (Gourley & Lane, 2009) the OUUK has been increasingly making some of its rich media content open available and accessible through OpenLearn and proprietary channels. While doing so only a proportion of this rich media has been under a Creative Commons licence (unlike much of the other text based material). This is because a lot of the legacy rich media material contains 3rd party

material (particularly music and BBC content) that would incur significant cost to be cleared for open release (if able to be cleared at all) with those rights owners or involves additional payments to actors and other contributors to the original programmes. Even so, where we have been able to publish such rich media content on YouTube this has given teachers the freedom to use the embed capabilities of YouTube videos to enable greater use 'as-is' but in the broader context of a course, unlike tracks from iTunesU which are for personal use by a learner. And while we often provide both low and high resolution versions of AV assets that are CC licensed there is inevitably reluctance on the part of other users to modify material that already has been highly structured for an educational purpose. However, as implied above, the OUUK itself is looking to reuse as much of its own content as reasonable and make it available in different formats through different channels that suit the needs of different users. The University is also taking on board the scope for more quicker and flexible ways to produce rich media content and so we encourage academics and others to produce and publish their own podcasts created at their own desks, and provide training in what makes a good podcast and for them to be more than just a 'studio lecture'. The OUUK is also encouraging the BBC to make more of its own vast archive of rich media available, especially its educational programming or other programming where it serves a valued educational purpose for study and/or research.

THE ADVANTAGES AND DISADVANTAGES OF RICH MEDIA FOR LEARNING

Whether it is for formal study by students (Bates, 1988) or informal study by a wider community of learners, rich, time based media can play a unique role in the teaching and learning experience:

Substitution: In a distance education context, it is sometime necessary to use rich media to substitute for what might have happened in more traditional contexts. For example rich media have often been used as substitutes for the ‘real thing’ such as a recorded ‘studio’ lecture or a ‘virtual’ science experiment. This is particularly important for students studying at a distance, or with limited mobility - where access to these may be limited and or where the costs of provision at home (for example a ‘home experiment kit’) is prohibitive;

Supplementing: While some basic uses of rich media compensate for the necessary constraints of distance education, other features provide unique and powerful complements to more tradition text based or face to face provision:

Unique Access: Students can be given access to worlds which are difficult to access even in traditional teaching contexts (arctic ice formations, deep sea life),

Impossible Access: Students can be shown simulations or animations of events or activities that are out of reach of human experience (inside the core of a working nuclear reactor, the unfolding process of the big bang, or the complexities of sub atomic interactions).

Archive: Much of the history of the 20th century is now captured on film in documentary and news archives. These archives provide students with unique access to new ways of understanding politics and history.

The Human element: Rich media have enabled learners to listen to or watch interviews to help not just understand what key people have to say, but how they say it. It might be possible to provide a summary account or transcript of a poetry reading or an interview with a victim of a crime. However, a first person recording can have both a powerful impact and provide potentially important or essential information missing within a transcript (intonation, emotion, pace etc).

The Emotive element: Rich media combinations of carefully composed picture sequences, words and music can ensure not just that infor-

mation is conveyed but that it is enhanced with emotional or visceral impact as well.

Dual Processing/Parallelism: The provision of audio tracks, alongside a pictures or diagram is potentially a very powerful pedagogic combination. It allows the learner to pay attention to a diagram, a table or image while spoken descriptions, commentary, analysis or instructions are provided in the audio track. This can be much more effective than the provision of a textual instruction alongside the image- as the learner often struggle to ‘flip’ back and forth between the object of interest and the instructions.

Time based media and processes: Revealing or explaining the structure and process of a complex system that changes over time can be significantly enhanced through time based media, for example animations of the working human heart or the workings of a combustion engines. Time lapse can also provide unique understanding of processes that could never be perceived or properly understood in real time.

Finally, the Medium is the message: Film, radio and TV materials are often themselves the subject of study, or the object of skills practice (e.g. content analysis).

So, rich media can provide a wide variety of unique and powerful teaching and learning experiences, supporting a range of teaching activities and learning styles. They have an obvious popular appeal and ICTs and the internet have shown that people now expect to consume not just text but video, audio and animations. However, they can also prove to be expensive distracters. Years of experience and research has shown that rich media is effective when its unique features are actively exploited. There are real dangers to using rich media simply as texture or ‘decoration’ for the text (the ‘illustrative’ talking head, revealing nothing additional of the speaker that a transcript would not).

In addition, as with any form of good teaching and learning experience, passive interaction with such rich media is always much less effective

than more active engagement. Learners usually need to be directed to undertake tasks that require closer examination of the rich media than treating it as though it were a broadcast programme. And such engagement is ensured if study of the rich media is necessary for the completion of course assignments! In other words the rich media are there to help learners achieve a specific learning outcome and not just for interest.

Another important feature of rich media out in the open on the internet is that their technical appeal matches their popular appeal. It is often the case that search engines favour video and audio tracks which in part is because of the popularity of websites that feature such content (e.g. YouTube is one of the top ten visited websites and its resident search facility one of the most used means of searching). So releasing educational content as rich media rather than as text can be a way to make your content much more discoverable. It is noticeable that a number of Universities have concentrated on AV tracks for their OER initiatives.

Equally, the greater availability and usability of new media technologies means that the wider public can generate and publish their own rich media, often openly licensed, shifting them and their relationship to one of being producers as well as consumers (so called prosumers – see <http://en.wikipedia.org/wiki/Prosumer>). The OUUK YouTube channel allows for users to upload their own videos to a specific part called Student Life.

STRATEGIC USE OF RICH MEDIA

The Open University in the UK has had rich media as a major part of its teaching and outreach activities since it began, consistently spending several million pounds sterling on them.

To begin with the programmes were devised as course related materials that either substituted for the actual observation of laboratory experiments, field sites (e.g. factories, art galleries,

nature reserves, museums) plays or other performances; provided interviews with key academics or professionals talking about particular topics; demonstrations of principles through animations or models; or acted as studio rather than classroom based lectures. While these programmes were supplemental to the other course materials and varied in their centrality to the learning outcomes of the courses, their broadcasting, as already noted, had an important part to play in the University's Royal Charter obligation to *'provide for the educational well being of the wider community'*. In the early days this was a serendipitous rather than planned benefit although it began to further shape the nature of the programmes that were produced as it was realised that there were multiple audiences for them, not just students, and as noted above these audiences were formally surveyed for their interests or they offered unsolicited comments upon them.

Through the extensive surveys of students and other learners (Anonymous, 2010) the purpose of these openly available rich media has been guided by a model of engagement whereby the relationship someone has with the OUUK could go through four phases:

1. Awareness – of the University and its association with certain rich media;
2. Interest – in using some of the media as a 'consumer';
3. Engagement - by contacting the OUUK for further information or informal educational materials supporting the programmes (such as posters and leaflets);
4. Commitment – to a formal offering from the OU, most usually signing up for a course but could be another event or service.

This learner journey can be very varied and occur over many years but recognises that, as lifelong learners, people are wanting a broader relationship with what the OUUK has to offer

than just being a student (although they can also be students for many years as well since most study part time and take several years to complete a qualification). The emergence of the internet has provided many more possibilities for having more meaningful two way communications with this wider community alongside those we have with students. Indeed widening access to and participation in higher education study is a central part of the OUUK's mission which OER have greatly helped with (Lane, 2008a).

The OUUK's current strategic approach to OER in general and rich media in particular is one of aligning it with the major activities and functions of the University as guided by its mission. Thus rich media are used to provide the most appropriate and effective learning experience for registered students seeking qualifications; to enable a wider public set of audiences to have informal learning opportunities; to use both to showcase the University's teaching and outreach programmes and increasingly its research findings; and to be part of a multi-way communication or collaboration network with a wide number of stakeholders. While the BBC has been, and will remain, the central partner for educational rich media over the past 40 years the OUUK now has partnerships of different types with a wider range of media organisations.

CONCLUSION

Finding or producing educational resources has never been easier if you are to use them within a mediated environment such as a formal course, where the teacher can place them in context and fellow students can contribute. At one time only very dedicated amateurs with money could produce good rich media to compare with that produced by media professionals. The advent of ever cheaper and widely available digital technologies has made the process of producing rich media accessible and affordable to many

more people. The rise of sites like YouTube is a testament to this trend. However, while some of this new content may be usable for educational purposes it is content devised specifically for an educational purpose (OER) that will be of most use for learners studying informally and by themselves (Lane, 2008b). The bringing together of educational experts (such as at the OUUK) with media specialists (such as at the BBC) can provide the most effective self study or supported educational resources, whether as openly available rich media resources or as openly licensed resources. As OER, most of this use of educational rich media will be 'as-is' without modification and repurposing since although the technical scope for remixing has never been easier, the pedagogical use of rich media is still a very new and little understood part of educational practice. Through collaboration between educational and media professionals comes innovation, experimentation and evaluation of what works and what does not.

REFERENCES

- Anonymous. (2010). *Programme on learner use of media: PLUM bibliography 1970-1994*. Retrieved from <http://kn.open.ac.uk/public/workspace.cfm?wpid=1030>
- Bates, A. W. (1988). Television, learning and distance education. *Journal of Educational Television*, 14(3). doi:10.1080/0260741880140305
- Darlington, J., Finney, A., & Pearce, A. (2003). *Domesday Redux: The rescue of the BBC Domesday Project videodiscs*. Retrieved from <http://www.ariadne.ac.uk/issue36/tna/>
- Gourley, B., & Lane, A. (2009). Re-invigorating openness at The Open University: The role of open educational resources. *Open Learning: The Journal of Open and Distance Learning*, 24(1), 57–65. doi:10.1080/02680510802627845

Lane, A. B. (2008a). Widening participation in education through open educational resources. In Ilyoshi, T., & Vijay Kumar, M. S. (Eds.), *Opening up education: The collective advancement of education through open technology, open content, and open knowledge* (pp. 149–163). MIT Press.

Lane, A. B. (2008b). Who puts the education into open educational content? In R. N. Katz (Ed.), *The tower and the cloud: Higher education and Information Technology revisited*, (pp. 158–168). Boulder, CO: EDUCAUSE. ISSN 978-0-9672853-9-9

Seatter, S. (2011). *Open University – The embodiment of innovation*. Retrieved from <http://www.bbc.co.uk/blogs/aboutthebbc/2011/01/post-1.shtml>

Weinbrein, D. (2011a). *Early use of the term university of the air*. Retrieved from <http://www.open.ac.uk/blogs/History-of-the-OU/?p=854>

Weinbrein, D. (2011b). *Harold Wilson's big idea*. Retrieved from <http://www.open.ac.uk/blogs/History-of-the-OU/?p=832>

ADDITIONAL READING

BBC. (2011b). About the BBC: A website explaining the work of the BBC. Retrieved from <http://www.bbc.co.uk/aboutthebbc/>

Kuomi, J. (2006). *Designing video and multimedia for open and flexible learning*. Routledge. Retrieved from <http://www.routledge.com/books/details/9780415383035/>

Open University. (2011a). *History of the Open University: Website dedicated to outlining and capturing all aspects of the OU's development*. Retrieved from <http://www8.open.ac.uk/research-projects/historyofou/>

KEY TERMS AND DEFINITIONS

Broadcasting: to provide one-way delivery of rich media to broad audiences through aerial transmission e.g. satellites, or via fixed communication networks e.g. Internet

Learner Journey: the route that a learner can take through a variety of free and for fee educational offerings from an educational institution over many years

Multicasting: delivery of rich media through a number of channels to a number of audiences

Narrowcasting: one-way delivery of rich media to targeted audiences

Prosumers: people who both consume and produce content in an internet based world

Rich Media: audio or video tracks, animations, and podcasts